

University of Nebraska - Lincoln

**DigitalCommons@University of Nebraska - Lincoln**

---

Historical Materials from University of Nebraska-  
Lincoln Extension

Extension

---

3-1948

## EC1025 Undulant Fever Brucellosis - (Bang's Disease)

Follow this and additional works at: <http://digitalcommons.unl.edu/extensionhist>

---

"EC1025 Undulant Fever Brucellosis - (Bang's Disease)" (1948). *Historical Materials from University of Nebraska-Lincoln Extension*. 2415.

<http://digitalcommons.unl.edu/extensionhist/2415>

This Article is brought to you for free and open access by the Extension at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Historical Materials from University of Nebraska-Lincoln Extension by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

March  
1948

Nebraska  
COOPERATIVE EXTENSION WORK  
IN AGRICULTURE AND HOME ECONOMICS  
U. of N. Agr. College & U. S. Dept. of Agr. Cooperating  
H. G. Gould, Acting Director, Lincoln

Extension  
Circular  
1025

UNDULANT FEVER

Brucellosis - (Bang's Disease)

Nature of the Disease

Undulant fever for people is an acute and chronic disease caused by germs of the Brucella group, and characterized by fever, weakness, sweating and general body aches. In the acute stage the fever tends to be higher at night than in the morning (undulating type). The nature and the duration of undulant fever is extremely variable - from a mild form when the patient is able to be up and about, to a severe illness, and from a few days' duration to many years. It is frequently confused with diseases such as influenza, tuberculosis, typhoid fever, malaria, or rheumatism.

Prevalence

Not many years ago undulant fever was regarded as a rare disease. It is still difficult to estimate the incidence of this condition. In 1946 more than 4,593 cases were reported in the United States. It is not known what percentage of the total number of cases the reported cases represent, for the data on which the number of chronic cases might be estimated is very meager. The number of cases should be multiplied by at least 10 to represent more nearly the actual state of affairs. There is a growing interest in undulant fever on the part of the medical profession, which is evidenced by the increasing number of tests made by State laboratories on specimens sent in by physicians.

In cattle, Brucella infestions (Bang's disease, contagious abortion) are serious from an economic standpoint. Since July, 1934, the United States Department of Agriculture has conducted a campaign of eradication of the cattle disease which was found to be prevalent everywhere, though more common in some localities than others. During the 67 months ended February 29, 1940, almost two million cattle - slightly more than 5 percent of the number found to give the specific reaction, and were condemned.

Cause

In this country there are three important varieties of the Brucella germ: Brucella Melitensis (goat), Brucella suis (hog), and Brucella abortus (cattle), each with a special affinity for one of the three species of animals concerned in transferring the disease to man.

All three varieties may infect man, but the type which most commonly infects cattle is less virulent for man than are the varieties which infect goats and hogs. The situation is complicated, however, because in localities where cattle are associated with infected goats or hogs, they may become infected with the goat or hog variety of germ and transmit it to man with all its original virulence.

UNIVERSITY OF NEBR.  
LIBRARY  
MAR 19 1948



### How Contracted

The disease in man is usually contracted by contact with infected animals, by drinking raw milk or by eating dairy products made of raw milk. Farmers, butchers, slaughter house employees, veterinarians or other persons whose work brings them in contact with infested animals or infected carcasses may develop the disease. The infection may enter wounds or breaks in the skin, or even through the intact skin. Infection from person to person rarely occurs. There is cause to believe that Brucellosis is sometimes spread by allowing the hogs and cattle to run in the same lot. The germs from the hog manure adhering to the cows teats and udders drop into the milk during the milking process and are ultimately taken into the human body.

The time between exposure to a source of infection and the onset of symptoms varies widely - from one week to four months.

### Diagnosis

With the aid of a blood test, a skin test, or best of all, by the cultivation of the germs from the blood or excretions, the physician may more readily establish a correct diagnosis.

### Treatment

There is at present no specific cure of proved efficiency for undulant fever. Vaccines made from the germs causing the disease have been used with apparent success in some cases.

### Outcome

The average duration of the acute disease is three to four months. The chronic disease may be disabling for many months, or even for years. The death rate is placed at between 2 and 3 percent.

### Prevention

1. According to our present knowledge, the only way to prevent infections in occupational groups is by the control of the disease in domestic animals, especially hogs and cattle. Herds of cattle are now being tested, and infected animals condemned.

2. Persons handling live or dead animals should exercise care as regards handwashing and general cleanliness in order to avoid infection. Antiseptics may be used following the handling of possibly infected materials.

3. The use of pasteurized or boiled milk.